AMENDMENTS TO THE CLAIMS

1.- (Currently Amended) A miniature broadband microstrip patch antenna comprising at least ~~two~~ first and a second conducting parallel surfaces and a conducting ground plane ~~or counter-poise,~~ the ~~conducting~~ first conducting surface acting as an active element being placed substantially parallel on top of said ground plane and including a feeding point, the second conducting surface acting as a parasitic element placed above ~~of~~ said first surface,

said patch antenna characterized in that at least one of ~~the~~ said first or second conducting surfaces consists of a planar ring comprising an inner and outer perimeter wherein the shape of at least one of said inner and outer perimeters is a space-filling curve, said space-filling curve being composed by at least ten segments, said segments connected with each adjacent segment, ~~said adjacent segments~~ and forming an angle with each adjacent segment, ~~their neighbours,~~ no pair of adjacent segments defining a larger straight segment, wherein said space-filling curve never intersects with itself at any point except the initial and final points, and wherein said segments must be shorter than a tenth of the free-space operating wavelength. ~~to keep the antenna size reduced~~.

2.- (Currently Amended) A miniature broadband microstrip patch antenna according to claim 1, wherein at least one of said conducting surfaces is displaced laterally such that the two axes that orthogonally cross the center ~~centre~~ of both surfaces do not overlap. ~~, to control this way both the impedance bandwidth and the beamwidth of the radiaton pattern~~.

3.- (Currently Amended) A miniature broadband microstrip patch antenna according to claims 1 or 2 wherein a dielectric, magnetic or magneto-dielectric material is placed below or above at least one of said first or second conducting surfaces.

4.- (Currently Amended) A miniature broadband microstrip patch antenna according to claims 1 or 2 ~~1,2 or 3~~ wherein the resonant frequencies of the first and second conducting surfaces are substantially similar with a difference less than ~~a~~ 20%.

5.- (Currently Amended) A miniature broadband microstrip patch antenna according to claims 1 or 2 ~~any of the previous claims~~ wherein the center of said inner perimeter does not match the position of the center of said outer perimeter and the antenna features an input impedance above 5 Ohms.

6.- (Currently Amended) A miniature broadband microstrip patch antenna according to ~~any of the previous claims~~ claims 1 or 2 wherein the antenna is operated at a frequency mode of larger order than the fundamental frequency ~~one~~ to feature a high gain radiation pattern.